Illustrated Parts & Service Map

HP LT3700 37-Inch LCD High-Definition Television

Document Number 454401-001.   1st Edition June 2007

Key Specifications

Resolution	1366 (H) x 768 (V)
Brightness	500 cd/m2
Contrast ratio	1000:1
Viewing angle	178 degrees
Response time	6 ms
Expected lifetime	60,000 hours
Scalar	Trident PX66
Supported input	480i, 480p, 720p, 1080i, 1080p (HDMI only)
Connectivity	AV in (2), Component In (YPbPr) (2), HDMI, (3), S-Video In (2), Antenna In (1), PC VGA In (1), Analog Audio In (L/R) (5), Pc Audio In (1), RS-232c (1), USB Port (1), Audio Out (1), SPDIF Out (1)
Speakers	2 x 10W, 1 way
Tuning	ATSC/NTSC/Clear - QAM
Power supply	120 V AC 60 Hz
Power consumption	220W
Panel manufacturer	LPL

Boards

1	Main board assy, including: - Main board - Cable: Main board to power supply	455594-001
2	Inverter board assy, including: - Inverter boards: Master and slave - Cables: Master and slave	455597-001
3	Control board assy, including: - Control board - LVDS cable - Ribbon cables (2)	455601-001
4	Keypad/Infrared assy, including: - Keypad buttons - Keypad PCA board - Infrared board - Cable: Main board to keypad	455604-001
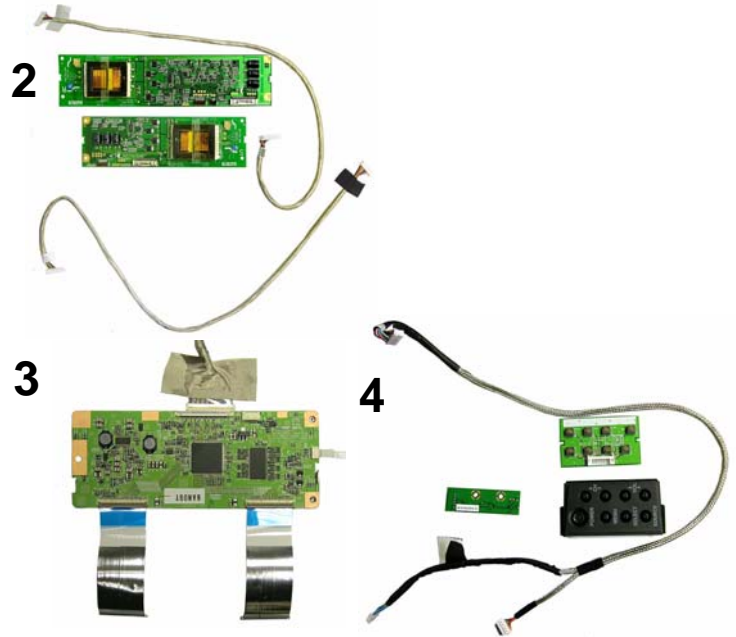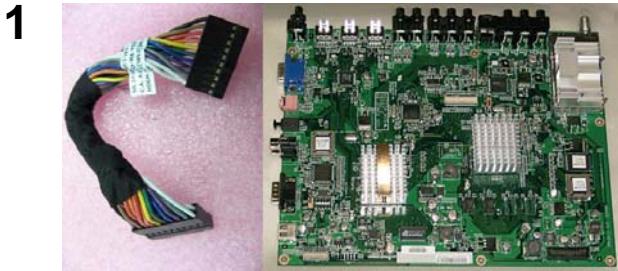
Covers/mounting/stand

|		
1	Stand neck assy, including: - Stand neck - Repair screw kit	455588-001
*	Stand base	452085-001
2	Back cover/bucket	452093-001
3	Mesh bracket board cover	452098-001
4	Internal support wall mount	452097-001
5	I/O bracket with AC inlet	452126-001

*Not shown

Misc parts

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1	Power supply assy, including: - Power supply - Cable: Power supply to main board	455591-001
2	Speakers (L and R and wire connectors)	452108-001
3	Front bezel including speaker cover	452115-001
*	Remote control	452113-001
*	Cable clamp	452127-001
*	VGA cord	453143-001
*	Whole unit - head only	451705-001
*	Power cord	8121-0740
*	Repair screw kit, includes:	452128-001
	Screw hex I#4-40/O#4-40 L7 NI (2)	Screw pan W/FLT SPG M3*8L NI (4)
	Screw T M4 P0.7 8L NI SAE1018 (4)	W37A-Screw-speaker-M3X10 (2)
	Screw M3X0.5 6L black ZN (4)	Screw M3 6L P T black ZN (4)
	Screw M4 6L M black ZN W32A (10)	Screw M4 10L P T black ZN W32A (4)
	Screw M5 15L M black ZN W32A (8)	Screw tap flat M4*10L NI (4)

*Not shown
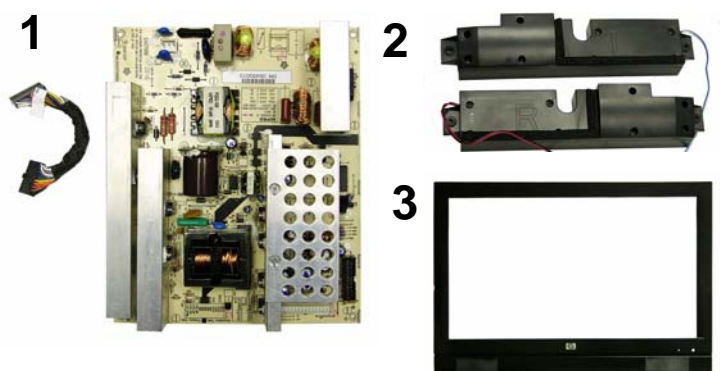
Component Placement
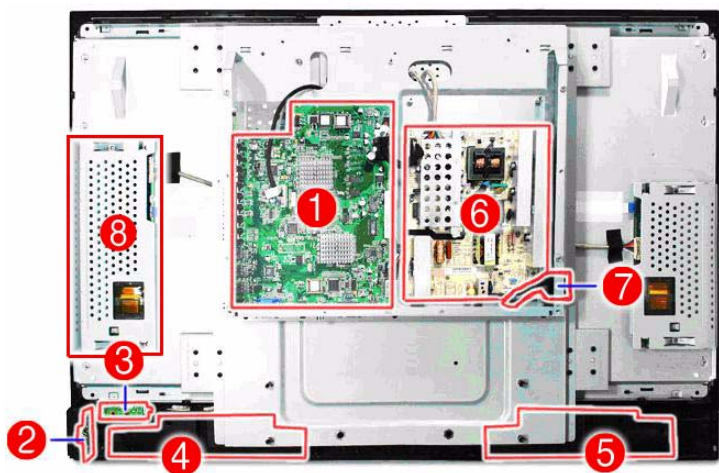
No	Description	No	Description
1	Main board	5	Speaker right
2	Keypad board	6	Power supply unit board
3	IR board	7	AC socket
4	Speaker left	8	Inverter

Main Board Layout
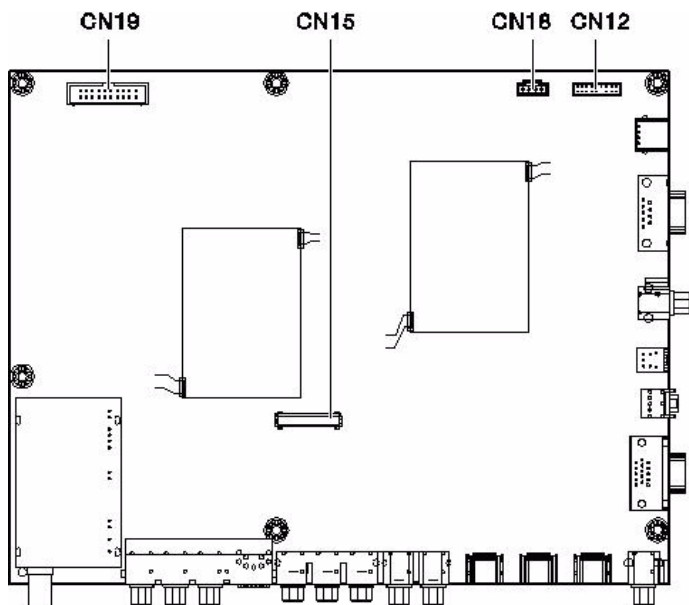
Connector	Specification	Description
CN19	13 pins/ROHS	Power supply from power converter board CN114
CN15	28 pins/ROHS	LVDS output signal (Between main board and panel)
CN18	4 pins/ROHS	Audio power
CN12	11 pins/ROHS	Keypad and IR control (connect to keypad board and IR board)

LED Indicators (all on main board)

Indicator	Blink Frequency	Failure Part
Amber and aqua LED blinking	1 sec interval	MCU Host link error
Amber LED blinking	1 sec interval	TAFE does not respond
Aqua LED blinking	1 sec interval	Tuner does not respond
Amber LED blinking	2 sec interval	Digital Demodulator does not respond
Aqua LED blinking	2 sec interval	Audio process does not respond
Amber and aqua LED blinking	2 sec interval	More than two I2C devices error

I/O Connectors

Name	Description
HDMI	Digital High Definition Input Video Input Connector with HDCP - Type A • HDMI 1 (with HDMI audio in L and R) • HDMI 2 • HDMI 3 Audio L and R must be set to PCM at the source across HDMI.
VGA	VGA monitor input with audio L/R (line in)
Audio-Input	• Digital (Optical) in Dolby Digital or PCM format) (S/PDIF) • Audio Output L and R stereo analog (RCA)
ANT/Cable in (RF input)	75-ohm unbalanced, F-type for VHF/UHF/CATV in
Component High Definition Input	• 1: Y, Pb, and Pr, and audio L and R • 2: Y, Pb, and Pr, and audio L and R
Serial RS-232	Serial input (Commercial use only)
Standard Definition Input	• AV Input 1: S-Vid, Video, and Audio L and R • AV Input 2: S-Vid, Video, and Audio L and R
Service Port	USB (For firmware upgrade use)

TV Indicators and Controls

POWER	Power button turns on the TV or places it in standby mode.
MENU	Menu displays the on-screen display (OSD) or closes the OSD menu.
SELECT	SELECT starts the Auto Sync function for a connected PC signal. In an OSD menu, selects the highlighted item in the OSD.
SOURCE	Source (SRC) selects the input Menu. In an OSD menu, this functions as a back button or moves you up one item or menu level.
+CH -CH	Channel (CH) selects the next or previous channel. In an OSD menu, press these buttons to move up or down in the menu.
+VOL -VOL	Volume (VOL) raises or lowers the sound level. In an OSD menu, press these buttons to move right or left in the menu or to adjust an item.
LED Indicator (left)	• Amber: TV is powering on (light turns off after about 30 seconds). • HP Aqua Blue: TV is off but plugged into the power source. • No light: TV is on or AC power cord is disconnected.
Remote Control Sensor (Right)	Receives the signal from the remote control.

SimpleMenu

Main	Sub1	Sub2/Options
Picture	Mode	**Vibrant** Standard Studio User
		Brightness
		Contrast
		Saturation
		Hue
		Sharpness
	Color Temp	Cool **Standard** Warm
	Aspect Ratio	**Auto** 16:9 Mode 4:3 Mode Zoom1 Zoom2 Panorama
	PC	**Auto Sync**
Audio	Mode	Voice **Standard** Music Other
	Auto Volume	**On** Off
	Virtual Surround	**Off** Theater Music Hall
	Speaker	**On**
Setup	Caption	On **Off** On Mute
	Default Settings	**Reset**

Wiring Diagram